



## APPENDIX

## Changes to Claims:

Claims 25-27 are added.

The following is a marked-up version of the amended claim(s) 1-24:

1. (Amended) A pyrolytic boron nitride double container for a source of molecular beams used in molecular beam epitaxy, comprising:

an outer container having an outer container transmissivity with respect to light having a wave number of 2600 cm<sup>-1</sup> to 6500 cm<sup>-1</sup>, and

an inner container having an inner container transmissivity with respect to light having a wave number of 2600 cm<sup>-1</sup> to 6500 cm<sup>-1</sup>;

wherein said inner container transmissivity is 90% or less of said outer container transmissivity, the transmissivity of an inner container of the pyrolytic boron nitride double container with respect to light having a wave number of 2600 cm<sup>-1</sup> to 6500 cm<sup>-1</sup> is 90% or less of that of an outer container.

2. (Amended) The pyrolytic boron nitride double container according to

Claim 1, said inner container comprising an inner surface and an outer surface;

wherein the said outer surface has a roughness of the outer surface of the inner container is roughened so such that said inner container transmissivity is 90% or less of said outer container transmissivity, the transmissivity of the inner container is 90% or less of that of the outer container.

3. (Amended) The pyrolytic boron nitride double container according to

Claim 1, comprising a doped layer comprising wherein an at least one element except nitrogen and boron is doped into the said inner container to form a doped layer;

wherein said at least one element is not selected from the group consisting of nitrogen and boron, and

wherein said doped layer has while at least one of the a thickness, an area, and a doping density of the doped layer is adjusted, so such that said inner container transmissivity is 90% or less of said outer container transmissivity, the transmissivity of the inner container is 90% or less of that of the outer container.

4. (Amended) The pyrolytic boron nitride double container according to Claim 2, comprising a doped layer comprising wherein at least one element except nitrogen and boron is doped into the said inner container to form a doped layer;

wherein said at least one element is not selected from the group consisting of nitrogen and boron, and

while wherein said doped layer has at least one of the a thickness, an area, and a doping density of the doped layer is adjusted, so such that said inner container transmissivity is 90% or less of said outer container transmissivity, the transmissivity of the inner container is 90% or less of that of the outer container.

5. (Amended) The pyrolytic boron nitride double container according to Claim 3, wherein the said doped layer is located within the inner container, and wherein said doped layer is formed such that the layer is not located exposed on neither said inner surface nor said outer surface of the said inner container.

6. (Amended) The pyrolytic boron nitride double container according to Claim 4, wherein the said doped layer is located within the inner container, and wherein said doped layer is formed such that the layer is exposed not located on neither said inner surface nor on said outer surface of the said inner container.

7. (Amended) The pyrolytic boron nitride double container according to Claim 3, wherein pyrolytic boron nitride is doped with one or more elements said at least one element is selected from the group consisting of Si, C, and Al.

8. (Amended) The pyrolytic boron nitride double container according to Claim 4, wherein said at least one element is pyrolytic boron nitride is doped with one or more elements selected from the group consisting of Si, C, and Al.

9. (Amended) The pyrolytic boron nitride double container according to Claim 5, wherein said at least one element is pyrolytic boron nitride is doped with one or more elements selected from the group consisting of Si, C, and Al.

10. (Amended) The pyrolytic boron nitride double container according to Claim 6, wherein said at least one element is pyrolytic boron nitride is doped with one or more elements selected from the group consisting of Si, C, and Al.

11. (Amended) The pyrolytic boron nitride double container according to Claim 1, wherein the an inner container thickness of the said inner container is increased greater than an outer container thickness of said outer container so such that said inner container transmissivity is 90% or less of said outer container transmissivity the transmissivity of the inner container is 90% or less of that of the outer container.

12. (Amended) The pyrolytic boron nitride double container according to Claim 2, wherein the an inner container thickness of the said inner container is increased greater than an outer container thickness of said outer container so such that said inner container transmissivity is 90% or less of said outer container transmissivity the transmissivity of the inner container is 90% or less of that of the outer container.

13. (Amended) The pyrolytic boron nitride double container according to Claim 1, wherein said inner container comprises a top, open portion and a bottom portion, and wherein the said inner container transmissivity of the inner container has a profile such that the transmissivity changes varies in the height direction of the inner container from said bottom portion to said top, open portion.

14. (Amended) The pyrolytic boron nitride double container according to  
Claim 2, wherein said inner container comprises a top, open portion and a bottom portion,  
and wherein said inner container the transmissivity varies of the inner container has a profile  
such that the transmissivity changes in the height direction of the inner container from said  
bottom portion to said top, open portion.

15. (Amended) The pyrolytic boron nitride double container according to  
Claim 13, wherein said inner container the transmissivity of the inner container decreases at  
the opening portion of the inner container from said bottom portion to said top, open portion.

16. (Amended) The pyrolytic boron nitride double container according to  
Claim 14, wherein the said inner container transmissivity of the inner container decreases at  
the opening portion of the inner container from said bottom portion to said top, open portion.

17. (Amended) The pyrolytic boron nitride double container according to  
Claim 13, wherein the said inner container transmissivity of the inner container increases  
from said bottom portion to said top, open portion at the opening portion of the inner  
container.

18. (Amended) The pyrolytic boron nitride double container according to  
Claim 14, wherein the said inner container transmissivity of the inner container increases  
from said bottom portion to said top, open portion at the opening portion of the inner  
container.

19. (Amended) The pyrolytic boron nitride double container according to  
Claim 1, wherein there is comprising a gap between the said inner container and the said outer  
container.

20. (Amended) The pyrolytic boron nitride double container according to  
Claim 2, wherein there is comprising a gap between the said inner container and the said outer  
container.

21. (Amended) The pyrolytic boron nitride double container according to Claim 19, wherein ~~the said gap between the inner container and the outer container~~ is 0.2 to 30 mm.

22. (Amended) The pyrolytic boron nitride double container according to Claim 20, wherein ~~the said gap between the inner container and the outer container~~ is 0.2 to 30 mm.

23. (Amended) A method of manufacturing a pyrolytic boron nitride double container for a source of molecular beams used in molecular beam epitaxy, comprising:  
~~wherein forming an inner container and an outer container of the pyrolytic boron nitride double container are formed by a CVD reaction,~~  
~~roughening the an outer surface of the formed inner container is roughened to,~~  
thereby adjusting ~~the an~~ amount of light scattered at the outer surface, and  
~~settings such that the an inner container transmissivity of the inner container~~  
with respect to light having a wave number of  $2600\text{ cm}^{-1}$  to  $6500\text{ cm}^{-1}$  ~~is set to 90% or less of that of the an outer container transmissivity, with respect to light having a wave number of~~  
 ~~$2600\text{ cm}^{-1}$  to  $6500\text{ cm}^{-1}$ .~~

24. (Amended) A method of manufacturing a pyrolytic boron nitride double container for a source of molecular beams used in molecular beam epitaxy, comprising:  
~~depositing in which pyrolytic boron nitride is deposited on a graphite mandrel by a CVD reaction, thereby in order to forming the double container,~~  
~~and the double container is then separated from the mandrel, wherein forming a doped layer in the pyrolytic boron nitride container by introducing a dopant gas is introduced during the CVD reaction of the inner container in order to form a doped layer in the pyrolytic boron nitride container,~~

adjusting and at least one of the thickness, area and the doping density of the doped layer is adjusted so as to,

setting the inner container transmissivity of the inner container with respect to light having a wave number of 2600 cm<sup>-1</sup> to 6500 cm<sup>-1</sup> to 90% or less of that of the an outer container transmissivity, with respect to light having a wave number of 2600 cm<sup>-1</sup> to 6500 cm<sup>-1</sup>, and

separating the double container from the mandrel.